CLAIMS

1. A handling device for holding a bearing liner which is to be introduced into the socket of an acetabular cup comprising a support provided with means for aligning said acetabular cup and having an opening which has a deformable rim adapted to receive the outer circumference of the bearing liner to be inserted.

2. The handling device as claimed in claim 1 wherein the means for alignment of said acetabular cup are formed by a substantially flat lower surface surrounding said opening.

3. The handling device as claimed in claim 1 wherein said support is in the form of a substantially flat plate.

4. The handling device as claimed in claim 1 wherein said support is made from a sheet material.

5. The handling device as claimed in claim 1 wherein said support is made from a synthetic plastics material.

6. The handling device as claimed in claim 1 wherein the support has a castellated rim.

7. The handling device as claimed in claim 1 further comprising means for retaining the bearing liner in the opening in the support.

8. The handling device as claimed in claim 7 wherein said retaining means are provided by said deformable rim which is adapted to resiliently grip the bearing liner.

9. The handling device as claimed in claim 7 wherein said retaining means are provided by a retainer adapted to extend across the upper rim of the bearing liner.

10. The handling device as claimed in claim 9 wherein means are provided for securing the retainer to the support.

11. The handling device as claimed in claim 9 wherein said retaining means are formed by an extended portion of the support which is bent back across the upper rim of the bearing liner.

12. The handling device as claimed in claim 9 wherein said retainer is provided with an opening of smaller dimensions than the upper outer rim of the bearing liner, said opening being aligned with the opening in the support when in use.

13. The handling device as claimed in claim 9 wherein said retainer is formed with a manually deformable portion which is aligned with said opening in the support when in use.

14. The handling device as claimed in claim 13 further comprising an operating handle adapted to manually deform the deformable portion to allow the handle to bear on the cup portion of the bearing liner to displace it from the support.

15. The handling device as claimed in claim 14 wherein means are provided to allow said operating handle to pass through a reception opening in said retainer so that it can bear against the surface of the cup portion of said bearing liner but cannot be withdrawn without carrying the retainer with it.

16. The handling device as claimed in claim 15 wherein said reception opening carries a screw head through which a co-operating screw thread on the operating handle can pass.

17. The handling device as set forth in claim 1 wherein the device is located on a bearing liner and is incorporated in a sterile package.

18. An instrument for aligning a liner and an outer shell of a two-piece prosthetic acetabular cup, the liner having a tapered male surface and an open end for

receiving a bearing element and a shell having a complimentary tapered female surface comprising:

a retainer having a perimeter for resiliently gripping the liner adjacent the open end thereof, the perimeter being in the form of a plurality of resiliently deformable elements, said retainer including a handle portion for allowing the alignment of the tapered male surface in the liner with the tapered female surface on the shell.

19. The instrument as set forth in claim 18 wherein the retainer is made of plastic.

20. The instrument of claim 19 wherein the perimeter of the retainer surrounds an inner opening sized to receive an outer perimeter of the liner.

21. The instrument of claim 20 wherein the resiliently deformable elements are formed by slits in said plastic extending radially outwardly from said inner perimeter of said opening.

22. The instrument as set forth in claim 18 wherein said retainer includes two portions, a first portion including said resiliently deformable elements and a second portion for contacting said liner at the open end thereof for preventing said liner from moving out of engagement with said resilient elements upon insertion of said liner into said shell.

23. The instrument as set forth in claim 22 wherein the retainer is made of plastic.

24. The instrument of claim 23 wherein the perimeter of the retainer surrounds an inner opening sized to receive an outer perimeter of the liner.

25. The instrument of claim 24 wherein the resiliently deformable elements are formed by slits in said plastic extending radially outwardly from said inner perimeter of said opening.

26. The instrument as set forth in claim 22 wherein said first and second portions are connected by a hinged joint.

27. The instrument as set forth in claim 26 wherein said hinged joint forms part of said handle.

28. A method of implanting a two-piece acetabular cup having an inner liner with an open end for receiving a bearing element and having a tapered outer surface and an outer shell having a complimentary inner tapered locking surface comprising:

implanting the outer shell in the acetabulum;

gripping the inner liner about a perimeter thereof by a plurality of resilient gripping elements located on a complimentary perimeter on an alignment instrument;

aligning the tapers on the inner liner and outer shell by manipulating a handle on the alignment instrument, the alignment instrument having a surface for preventing the disengagement of the resilient gripping elements from the liner; and inserting the liner in the shell.

29. The method as set forth in claim 28 wherein the resilient portion of the instrument is made of plastic.

30. The method as set forth in claim 29 wherein the resilient elements are formed by slits extending radially outward from the complimentary perimeter which surrounds an opening in the instrument for receiving said liner.

31. The method as set forth in claim 30 wherein said instrument is in the form of a retainer, said retainer includes two portions, a first portion including said resiliently deformable elements and a second portion for contacting said liner at the open end thereof and having said surface for preventing said liner from moving out of engagement with said resilient elements upon insertion of said liner into said shell.

32. The method as set forth in claim 28 further comprising removing the alignment instrument from the inner liner.

33. The method as set forth in claim 32 wherein the instrument is removed by moving the surface for preventing disengagement of the gripping element from the liner out of engagement with the liner.